

REMARKS

Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1 to 22, 24 to 27, 29 to 41, and 43 to 48 were pending in this application. Claims 1, 4, 6, 17, 20, 22, 26, 27, 32, 38, and 40 have been amended by way of this paper. Also, claims 3, 25, 31, and 39 are canceled. No claims have been added.

Allowed Claims

Claims 3 to 10, 13 to 15, 19, 25 to 26, 31 to 32, 36 to 37, 39 to 41, and 43 to 48 are allowed or are indicated as being directed to allowable subject matter.

Rejections Under 35 U.S.C. § 102(b)

The Examiner has rejected claim 38 as being anticipated by U.S. Patent No. 6,294,807 (Chittipeddi). This rejection is moot in view of the present amendment, which incorporates the features of claim 39 into independent claim 38. Claim 39 is indicated as being directed to allowable subject matter. It is therefore submitted that claim 38 is in condition for allowance.

Rejections Under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1 to 2, 11 to 12, 16 to 18, 20 to 22, 24, 27, 29 to 30, and 33 to 35 as being unpatentable over U.S. Patent No. 6,733,908 (Lee) in view of U.S. Patent No. 6,207,295 (Stowell). The rejected independent claims are claims 1, 16, 17, 20, 22, and 27. The rejections of claim 1, 17, 22, and 27 are moot in view of the present amendment, which incorporates into those claims the feature of an environmental barrier layer, as recited in allowable claims 3, 25, and 31. For at least this reason, claims 1, 17, 22, and 27, and all claims depending therefrom, should be in condition for allowance.

Regarding independent claims 16 and 20, each of these claims as currently presented recites that a first oxygen barrier layer has a thickness in the range of from about 1 to 20 microns, and that first and second isolation layers, formed on each side of the first oxygen barrier layer, have thicknesses in the range of from about 1 to 100 microns. This feature is neither taught nor suggested by the prior art.

Lee discloses a coating (layer 12, following the Examiner's lead) that includes Ta<sub>2</sub>O<sub>5</sub>.

However, Lee fails to teach or suggest that the Ta<sub>2</sub>O<sub>5</sub> is formed on each side of an oxygen barrier layer (SiO<sub>2</sub>). Stowell discloses alternating layers of Ta<sub>2</sub>O<sub>5</sub> and SiO<sub>2</sub> formed over a non-silicon based substrate. It is not apparent from reading Stowell or Lee what motivation there would be for employing this alternating layered structure for that of Lee. One particular barrier to incorporating the Stowell layering system around the Ta<sub>2</sub>O<sub>5</sub> layer described by Lee is the differences between the size of the layers in each system. Lee discloses that the Ta<sub>2</sub>O<sub>5</sub> layer has a thickness of between 1 and 500 microns (col. 8, lines 59 to 62). In contrast, the alternating Ta<sub>2</sub>O<sub>5</sub> and SiO<sub>2</sub> layers disclosed by Stowell have thicknesses ranging between 0.1 to 0.23 microns for each Ta<sub>2</sub>O<sub>5</sub> layer, and between 0.1 and 0.4 microns for the SiO<sub>2</sub> layers. Clearly, Stowell does not intend for the miniaturized layering system disclosed therein to be employed in a much larger layering system such as that disclosed by Lee. For this reason, a person of ordinary skill in the art would not be motivated to combine Stowell and Lee and arrive at the invention as recited in claims 16 and 20. It is therefore respectfully submitted that claims 16 and 20, and all claims depending therefrom, are in condition for allowance.

### Conclusion

Based on the above, it is respectfully submitted that the independent claims now present in the application are patentable over the citations of record. The dependent claims are also deemed patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicants' submit that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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